Supporting information for

Development of a nanobody-alkaline phosphatase fusion protein and its application in a highly sensitive direct competitive fluorescence enzyme immunoassay for detection of ochratoxin A in cereal

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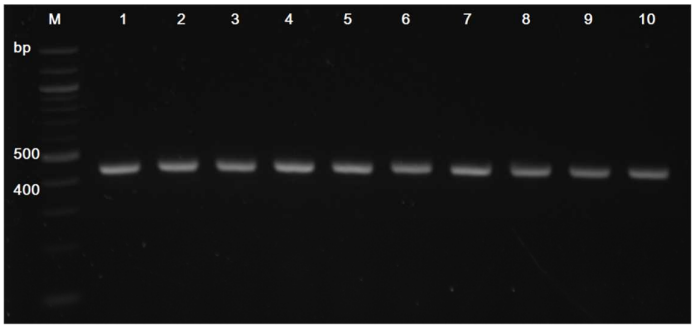

Figure S-1. Colony PCR analysis of recombinant plasmid pecan45-Nb28-AP. Lane M, 100 bp DNA ladder; Lane 1-10, colony PCR products of ten single transformed colonies randomly picked from the Luria-Bertani (LB)-agar plates containing 50 μg/mL carbenicillin. Each PCR reaction (20 μL) consisted of 10 × high fidelity PCR buffer, 10 mM dNTP mixture, 50 mM $MgSO_4$, 10 μM of primer AP-F and AP-R, transformed bacteria, platinum Taq high fidelity, and sterilized water. PCR was carried out as follows: 94 ℃ for 2 min, followed by 30 cycles of 94 ℃ for 30 s, 55 ℃ for 30 s, and 68 °C for 1 min. The 433-bp target DNA was confirmed by agarose gel electrophoresis.

Table S-1. Sequence of primer

Name	Sequence (5′- 3′)
AP-F	CATGCCATGACTGTGGCCCAGCCGGCCCAGKTGCAGCTCG TG GAGTCNGGNGG
AP-R	CATGCCATGACTCGCGGCCCCCGAGGCCTCGCCTTGTGGT TTTGG TGT CTT GGG

Table S-2. Precursor and corresponding product ions for the MRM detection

Chan Reaction	Dwell (secs)	Cone Volt.	Col. Energy
404.00 ＞ 239.00	0.100	28.0	22.0